Unit 201: Employment and employability in the building services engineering sector

# Worksheet 12: Solution-driven problem-solving and scope of responsibility (tutor)

**Task 1**: Using the scenario provided, answer the questions that follow.

You are an electrician working on a new build school project. You are responsible for installing emergency lighting systems within the building. You are using a particular type of cable that you have used before, but you are not sure if it meets the local building regulations. The cable was supplied by the client and the project manager has not provided you with any specifications or guidelines regarding the cable.

1. What steps would you take to find out if the cable you are using is compliant with local building regulations?

Answer:

* Check the packaging or labels on the cable to see if it meets any local or national standards.
* Look up the cable on the manufacturer's website to see if they have any information about the material's compliance with local building regulations.
* Check with local building authorities to see if the cable meets their requirements.
* Consult with your supervisor or project manager to see if they have any specifications or guidelines for the cable and use industry guides such as the IET Onsite guide to check against current regulations and guidance.

1. What are the consequences of using non-compliant cable?

Answer examples:

* fines and penalties from regulatory authorities
* increased risk of failure under fire conditions, or other safety hazards
* delays in the project timeline if the cable needs to be replaced or brought up to code.

1. Why is it important to involve your supervisor in this situation?

Answer: Because they are responsible for ensuring that the project complies with all local building regulations and specifications. Your supervisor may have more information about the cable or may be able to consult with other experts to determine its compliance. In addition, involving your supervisor shows that you are taking responsibility and seeking guidance when you are unsure about a situation.

1. How would you approach your supervisor about your concerns?

Answer: By scheduling a meeting or asking for a moment to speak with them privately. You could explain your concerns and provide any information or evidence you have gathered about the cable. You could also ask for their advice on how to proceed and if they have any additional information or specifications that could help.

1. What could you do to prevent a similar situation from occurring in the future?

Answer:

* Communicate with your supervisor or project manager about any concerns or questions you have regarding materials or specifications.
* Research and verify the compliance of any materials or equipment before using them.
* Attend training or educational sessions and CPD to stay up-to-date on local building regulations and safety guidelines.
* Keep records of any compliance certifications or documentation for materials and equipment used in the project.

**Task 2**: As a self-employed tradesperson in the UK, effective problem-solving skills are essential for your success. Put the steps below in order in the spaces provided.

Step 1

*Define the problem*

Step 2

*Gather information*

Step 3

*Generate solutions*

Step 4

*Evaluate the solutions*

Step 5

*Implement the solution*

Step 6

*Evaluate the outcome*

**Task 3**: Using the space provided, answer the questions below related to the scope of responsibility within industry.

1. What is the scope of responsibility for a tradesperson within industry?

Answer: Ensuring compliance with health and safety regulations, following building codes and standards, and delivering quality workmanship.

1. Why is it important for a tradesperson to have a good understanding of their responsibilities?

Answer: It enables them to make informed decisions when rectifying problems, which can help them to ensure compliance with regulations, improve safety and deliver quality work.

1. How can a tradesperson ensure that they are meeting their responsibilities?

Answer: By regularly updating their knowledge of building codes and regulations, seeking clarification from their supervisor when needed and following established procedures and protocols.

1. What are some potential consequences of a tradesperson failing to meet their responsibilities?

Answer: Injury or harm to themselves or others, damage to property, legal liability and reputational damage to themselves or their employer.

1. How can employers support their tradespeople in meeting their responsibilities?

Answer: By providing adequate training and resources, establishing clear procedures and protocols, and fostering a culture of safety and compliance within the workplace.

1. What are some situations where it might be necessary to involve a supervisor in problem-solving as a tradesperson within industry?

Answer: Complex problems, safety issues, lack of resources, regulatory compliance, poor workmanship, material issues including damage or incorrect materials and client changing the design or client requests.

1. How can tradespeople determine when it is appropriate to pass on responsibility for problem-solving to a supervisor?

Answer: Tradespeople can use their judgement to determine when to involve a supervisor by considering factors such as the complexity of the problem, the level of risk involved and the resources available to address the problem.

1. Why is it important to involve a supervisor in problem-solving cases where the problem poses a risk to safety or health?

Answer: Because the supervisor can assess the situation and take appropriate action to ensure the safety of all involved.

1. How can effective communication with supervisors help in problem-solving as a tradesperson?

Answer: It ensures that everyone involved is aware of the situation and can work together to find a solution. It also helps to ensure that the tradesperson has the necessary support and resources to address the problem effectively.